



# Methamphetamine Use and HIV Risk

Methamphetamines stimulate the pathway that controls pleasure, cause euphoria and excitement and are prone to abuse and addiction. Lowered inhibitions combined with increased urgency and need for sex increase the risk of acquiring sexually transmitted diseases, including HIV.

In general, research shows that MSM under the influence of methamphetamine may increase their sexual risk factors. This includes a decrease in frequency of condom use, increase in number of partners, unprotected receptive anal sex and sharing needles utilized for methamphetamine injections (CDC, 2007).

The largest numbers of methamphetamine users are living in rural areas and are working class (CDC, 2007).

## Background

Methamphetamine, commonly referred to as meth or ice, is a stimulant drug. It can be taken orally, intranasally (snorting the powder), by needle injection, or by smoking. Users may become addicted quickly, needing higher doses and more often. Once methamphetamine enters the brain, it triggers the release of three primary chemicals. The first is norepinephrine, which helps control alertness and arousal. Secondly, dopamine is released, which plays an important role in the regulation of behavior. Finally, methamphetamine triggers the release of serotonin which is believed to play a role in regulation of sexuality.

Since it stimulates the pathway that controls pleasure, methamphetamine causes euphoria and excitement and is prone to abuse and addiction. Common immediate effects of methamphetamine include euphoria, increased energy and alertness, an increase in the need and urgency for sex and the ability to have sex for prolonged periods of time (Wikipedia, 2007). Methamphetamines also may cause erectile dysfunction and some men use

erectile dysfunction medications while under the influence of the drug (CDC, 2007). Lower inhibitions combined with increased urgency and need for sex increase the risk of acquiring sexually transmitted diseases, including HIV.

## Research

There is a growing body of research on methamphetamine use and the link with HIV infection, particularly among men who have sex with men (MSM). Evidence establishes a higher risk of HIV transmission among heterosexual adults and adolescents under the influence of methamphetamine, but since the baseline prevalence of HIV is higher among MSM, this population tends to be at greater risk for transmission. In general, research shows that MSM under the influence of methamphetamine may increase their sexual risk factors. These include a decrease in frequency of condom use, increase in number of partners, unprotected receptive anal sex and sharing needles utilized for methamphetamine injections (CDC, 2007).

In August 2007, researchers determined the prevalence and factors of Viagra® use in combination with methamphetamine and its association with HIV risk behavior among MSM in San Francisco. Out of the 1,976 MSM in the sample, 13.5% used Viagra® alone, 7.1% used methamphetamine without Viagra® and 5.1% used Viagra® with methamphetamine. Of the MSM using Viagra® and methamphetamine, 57% were HIV-infected and 47% had unprotected insertive anal sex with male partners of unknown or different HIV status. This same study also determined that the median number of sexual partners among men who used Viagra® in combination with methamphetamine was 20 in the past 12 months compared to 2 partners among men who did not use Viagra® and did not use methamphetamines in the past 12 months (Spindler et al., 2007). Although this data is not generalizable to MSM living in Virginia, it is important, because it suggests that MSM who use Viagra® with methamphetamine have high prevalence rates of HIV and engage in HIV risk behaviors.

## Discussion

Methamphetamine use impairs the ability and desire to be safe, both sexually and when injecting drugs. The National Institute on Drug Abuse recommends that prevention programs should start early. A broad approach includes enhancing HIV and STD prevention and care programs to include assessment for methamphetamine use. Testing and sexual health promotion is needed to address the use of methamphetamine and risk for HIV and STD infection (CDC, 2007).

## REFERENCES

CDC. (2007). Methamphetamine Use and Risk for HIV/AIDS [Brochure]. Atlanta, Georgia: Author. Retrieved October 10, 2007, from <http://www.cdc.gov/hiv/resources/factsheets/meth.htm>

SAMSHA. (2006, March 02). Methamphetamine Abuse in the US. Retrieved October 11, 2007, from <http://www.oas.samhsa.gov/NHSDA/Treatan/treana13.htm#Intro>

Spindler, H. H., Scheer, S., & Cheen, S. (2007). Viagra, Methamphetamine, and HIV Risk: Results from a Probability Sample of MSM, San Francisco. *Journal of Sexually Transmitted Diseases*, 34, 586-591.

Wikipedia. (2007, October 11). Retrieved October 10, 2007, from <http://en.wikipedia.org/wiki/Methamphetamine>